



May 6, 2009

0-61M-107031/Phase 0300/T2

Mr. David Lacey
Oregon Department of Environmental Quality
2020 S.W. 4th Avenue
Portland, Oregon 97201

Dear Mr. Lacey:

**Re: April 7, 2009 SLLI/DEQ/EPA Meeting Summary
RP – Portland Site**

On behalf of SLLI, AMEC Earth & Environmental, Inc. (AMEC) has prepared this letter to provide a summary of key issues discussed and agreements reached during the April 7, 2009 meeting between SLLI, the Oregon Department of Environmental Quality (DEQ), and United States Environmental Agency (EPA). Representatives were in attendance at both the Portland (DEQ) and Seattle (EPA) agency offices, with a teleconference link. The primary discussion topic was the EPA's January 26, 2009 letter to SLLI regarding the deep gravel zone (DGZ) at the Rhône-Poulenc Portland site (RP Site) and transition zone water (TZW) sampling in the Willamette River (River).

Attendees

SLLI: J. Underwood

AMEC: R. Gresh, S. Gormley

DEQ: J. Anderson, D. Lacey, M. McClincy, M. Kent, T. Gainer

EPA: K. Koch, R. Fuentes, C. Humphrey

Agency Roles and Concerns

- EPA considers any source to the River to be part of the Portland Harbor Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) site (PH Site); EPA wants assurance that any upland Source Control (SC) meets EPA standards, is compatible with in-River remedy, and protective against recontamination. EPA must consider both the immediate and longer-term considerations of upland actions.
- DEQ will make decisions about adequacy of nature and extent characterization, feasibility studies, and SC for the RP Site; however, DEQ will solicit review comments from EPA on engineering evaluations/alternatives analyses (EE/CAs) and the source control alternatives analysis (SCAA) for the RP Site; EPA's more immediate concern is completion of the remedial investigation (RI) and the source control evaluation (SCE) reports.

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- At higher priority sites, DEQ wants to conduct removal actions (early actions) to interrupt complete pathways to the River, and then conduct upland containment and other final remedial actions.

DGZ and TZW Issues

- The adequacy of the TZW sampling in the River near river mile (RM) 7 conducted by Lower Willamette Group (LWG) under EPA lead is being evaluated by the agencies; DEQ has taken the lead under the authority of their Consent Orders for Gasco, RP, and other sites.
- Data collection objectives for additional TZW samples near the RM 7 railroad bridge is debatable; SLLI believes that TZW data is only needed for remedial design purposes associated with the in-River sediment remedy. EPA (R. Fuentes and K. Koch) agreed that TWZ sampling is only needed for sediment remedy design and neither for evaluating RP's groundwater discharges to the River nor for the LWG feasibility study (FS). C. Humphrey (EPA) also indicated his inclination to agree that additional TZW data are not needed for the LWG FS.
- Both EPA and DEQ have concerns that the understanding of groundwater discharge to the River is incomplete; although the groundwater conceptual site model (CSM) for the RP Site still needs completion, EPA suggested that SLLI prepare a graphical representation of groundwater at the riverbank projecting discharge from the DGZ and the basalt into the River. This would include the area near Lots 1 and 2 area of Arkema property. EPA (K. Koch and R. Fuentes) indicated that it is better to represent the groundwater plume in a graphical manner rather than collecting large amounts of data in the River.
- SLLI agreed to generate depictions aligned perpendicular to the River through the area of wells RP-08, RP-13, and W-19 along groundwater flow lines that integrate multiple factors including geology, lithology, basalt bedrock topography, groundwater potentiometric surface contours, groundwater flow direction arrows, and constituents of concern (COI) concentrations. This information will be compared against in-River data and be used to evaluate whether additional TZW sampling is needed for remedial design purposes.
- EPA asked whether SLLI planned to conduct new monitoring well drilling that would provide information about the potential discharge to the River of RP COIs from the weathered basalt. SLLI indicated that a primary objective of the EPT is to evaluate the amount of capture within the DGZ provided from extraction wells in the upper portion of the DGZ. EPA (K. Koch) agreed with the logic of this objective. EPA indicated that SLLI should consider drilling additional "step out" monitoring wells deeper in the DGZ near the riverbank to evaluate groundwater discharges to the River. EPA (K. Koch) stated that they would send an email to SLLI suggesting that several new riverbank wells be installed to provide "better definition" of the bottom of the DGZ. In response to EPA's email that was received April 8, 2009, SLLI intends to install additional new monitoring wells near the riverbank to serve this purpose. Information from these wells, along with information from the other eight existing well clusters near the riverbank, will be integrated into SLLI's revised CSM.
- In response to an inquiry from DEQ about a separate "basalt investigation" drilling program, SLLI stated that none is planned at this time.
- EPA (K. Koch) raised a question about whether natural attenuation or an enhanced sediment cap is expected to address potential RP COIs in the "stranded wedge" of

groundwater between NFA and the River following implementation of the NFA interim source control measure. SLLI anticipates addressing this issue in the source control alternatives analysis document. K. Koch also indicated there is a possibility of technical impracticability waivers (TIWs) related to the stranded wedge but long-term conditions would need to be considered.

- EPA and DEQ were in agreement that EPA will only provide a generalized review of SLLI work plans for the EPT. It was agreed that TZW sampling would not occur at this time pending the results of the EPT work, the 2009 Groundwater sampling event, and the completion of the SCE including the revised CSM.

Actions that have been taken since this meeting include the following:

1. The location and depth of deeper basalt wells has been reviewed and recommended revised well placements are contained in the response to comments for the EPT submitted to DEQ on April 30, 2009. Four deep wells are proposed. Three are located near the River to obtain groundwater information adjacent to the River and were chosen based on accessibility on historical groundwater analyses. One is located closer to the EPT pumping wells to obtain information in the vicinity of the wells.
2. SLLI is currently reviewing methods and areas to depict the CSM.
3. SLLI submitted to DEQ a May 1, 2009 Work Plan describing the details of the proposed 2009 Groundwater Monitoring Event.

Don't hesitate to contact Roger Gresh at (503) 639-3400 or Joan Underwood at (503) 278-1837 if you have any questions.

Sincerely,

AMEC Earth & Environmental, Inc.



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Senior Associate Chemist



Roger T. Gresh, P.G.
Project Manager

RTG/lp

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K. Koch, EPA